

**3.4.5 2030 Commercial Buildings Energy End-Use Carbon Dioxide Emissions Splits, by Fuel Type
(Million Metric Tons) (1)**

| | Natural | Petroleum | | | | | Coal | Electricity (3) | Total | Percent |
|--------------------|---------|-----------|--------|-----|--------|-------|------|-----------------|---------|---------|
| | Gas | Distil. | Resid. | LPG | Oth(2) | Total | | | | |
| Lighting | | | | | | | | 246.9 | 246.9 | 16.7% |
| Electronics | | | | | | | | 168.2 | 168.2 | 11.4% |
| Space Heating | 75.1 | 11.0 | 8.1 | | 1.3 | 20.5 | 7.9 | 27.2 | 130.7 | 8.9% |
| Space Cooling | 1.1 | | | | | | | 112.4 | 113.4 | 7.7% |
| Water Heating | 38.8 | 3.7 | | | | 3.7 | | 29.7 | 72.2 | 4.9% |
| Computers | | | | | | | | 64.8 | 64.8 | 4.4% |
| Refrigeration | | | | | | | | 51.4 | 51.4 | 3.5% |
| Ventilation | | | | | | | | 42.4 | 42.4 | 2.9% |
| Cooking | 17.3 | | | | | | | 6.6 | 23.8 | 1.6% |
| Other (4) | 21.5 | 1.6 | | 5.9 | 3.8 | 11.3 | | 287.8 | 320.6 | 21.7% |
| Adjust to SEDS (5) | 47.0 | 13.9 | | | | 13.9 | | 179.0 | 239.9 | 16.3% |
| Total | 200.7 | 30.3 | 8.1 | 5.9 | 5.1 | 49.4 | 7.9 | 1,216.3 | 1,474.3 | 100% |

Note(s): 1) Emissions assume complete combustion from energy consumption, excluding gas flaring, coal mining, and cement production. Emissions exclude wood since it is assumed that the carbon released from combustion is reabsorbed in a future carbon cycle.
 2) Includes kerosene space heating (1.3 MMT) and motor gasoline other uses (3.8 MMT). 3) Excludes electric imports by utilities.
 4) Includes commercial service station equipment, ATMs, telecommunications equipment, medical equipment, pumps, emergency electric generators, and manufacturing performed in commercial buildings. 5) Emissions related to a discrepancy between data sources. Energy attributable to the buildings sector, but not directly to specific end-uses.

Source(s): EIA, Annual Energy Outlook 2008, Mar. 2008, Table A2, p. 117-119, Table A4, p. 122-123 and Table A5, p. 134-135 for energy consumption, and Table A18, p. 143-144 for emissions; EIA, National Energy Modeling System for AEO 2008, Feb. 2008; EIA, Assumptions to the AEO 2008, April 2008, Table 2, p. 10 for emission coefficients.